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ABSTRACT

The British Columbia Social Studies Assessment program gathered information about: (1) students' knowledge, skills, and opinions of society and social studies; (2) the reaction of various publics to student performance; (3) the relationship of school and non-school factors to student performance; (4) professional and non-professional views of the social studies curriculum objectives; and (5) teachers' views of the actual and desirable activities, resources, professional development, and curriculum development. A variety of tests, scales, surveys, observations, interviews, and analysis techniques were used to gather and summarize the data. The use of diverse approaches to program evaluation was defended as complementing empirical evaluation. It was stated that curriculum evaluators should not be sovereign in program evaluations and that account should be taken of the interests and needs of the end users of evaluations. (MH)

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Working Draft

Curriculum Evaluation: An Empirical Perspective

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Program evaluation is a role-directed, client-oriented enterprise. It must yield data, findings, and recommendations that are credible and comprehensible to program decision-makers and practitioners. These program evaluation clients are both 'insiders' and 'outsiders' with respect to program entities, or features, being described and evaluated. The result of evaluations must be applicable to such roles as curriculum revision, allocation of resources, professional development, informing relevant publics, as well as future evaluation and research. Given our assumption about the clients of the enterprise it is clear that program evaluation should be conducted from the perspectives of both insiders and outsiders. Given the diverse roles of program evaluations it appears that a variety of social scientific procedures and orientations will be required to gather a broad range of information about program features.

The Empirical Approach to Curriculum Evaluation

Empirical orientations and procedures provide the possibility of providing credible and comprehensive information, particularly from the outsider's, or objective observer's, perspective. Although program evaluation is an untidy business at best, empirical orientations and procedures have the distinct advantage of being guided by the norms of (1) controlled observations, (2) quantitative methods, (3) reduction and control of observer bias, and (4) replicability and verifiability of observations and findings. Although these norms are not always fully attained they do provide criteria for the acceptance or rejection of empirical claims. Ideally, the empirical evaluator reports his/her observations in such a way that they can be confirmed or rejected by other investigators. This availability of public criteria and procedures for judging the credibility of empirical evaluation claims is an important feature both for evaluators and for the consumers, or clients, of program evaluation.

Jurgen Habermas (1972) is correct in claiming that technical control

is a cognitive interest of empirical science. He is mistaken in implying that control is the only interest of the creators and users of empirical knowledge. It is not clear whether Habermas views the technical control that is permitted by the norms, assumptions and procedures of empirical science as desirable or undesirable. I would argue that the evidential objectivity and verifiability of empirical claims is essential to the diverse interests of those who create and apply the findings and recommendations of program evaluations.

Admittedly, empirical norms of reliability and parsimony to some degree work counter to a rich, or 'thick', description of program entities However, non-empiricists such as Habermas and Apple (1975) tend to underestimate the possibilities and varieties of empirical procedures and orientations, particularly when utilized in conjunction with alternative ways of knowing, such as the interpretive and critical. This underestimation includes the failure to appreciate the value of breadth of description allowed by the application of empirical procedures for sampling and estimation of population parameters. Smith's (1978) application of the notion of complementarity to evaluation suggests that we can "avoid the tyranny of greatly over-simplifying the world around us" by applying multiple perspectives, empirical and non-empirical, to program evaluation. Complementarity requires replacing the criterion of exact (but limited) truth with criteria of practical utility and level of certainty. According to Smith, the notion of complementarity is an alternative in evaluation methodology to "polarization around the logical-positivist versus the phenemenological viewpoint."

The diverse roles of the British Columbia Social Studies Assessment required the gathering of descriptive and evaluative data about a broad range of program entities. These entities included:

1) Student knowledge, skills, and "views about" society and social studies,
2) The reaction of various publics to student performance,
3) The relationship of school and non-school factors to student performance in social studies,
4) The views of professional and non-professional publics throughout

British Columbia of the goals and objectives of social studies, and

5) The views of teachers concerning actual and desirable social studies activities, resources, professional development, and curriculum development.

These features were assumed to be amenable to one or more forms of empirical study. A variety of testing, scaling, survey, observation, interview, and analysis techniques were available for the gathering, analyzing and summarizing of empirical data about the social studies program in British Columbia. Achievement test methodology was utilized for the study of student achievement and views. Survey and attitude methodologies were utilized to study teacher views of social studies and of curriculum resources, as well as public views of goals and objectives. Panel review procedures were used to elicit the views of various publics about student performance. Questionnaire procedures were used to gather information about pupil characteristics and out-of-school factors. Some of these and other entities were also studied and interpreted from perspectives other than the empirical as you will hear later.

Assessment of Student Achievement and Views

The report of Student Achievement and Views in social studies (Aoki et. al., 1977b) was based upon pencil-and-paper tests administered to a sampling of about ten percent of grades 4, 8 and 12 students in British Columbia public schools. These tests were composed entirely of objective achievement and attitude test items in multiple-choice format. The number of items presented to students ranged from 44 at the grade 4 level to 92 at the grade 12 level.

Four areas of student achievement, (1) Knowledge of Canadian Society and Institutions, (2) Knowledge of World Cultures, (3) Skills of Social Inquiry (e.g., hypothetical thinking, map comprehension, sources of information), and (4) Ability to Recognize Key Value Questions, were assessed at the grade 8 and 12 levels. Student performance in only the

first three of these areas was assessed at the grade 4 level. Items 'tapping' student views about Canadian diversity, socialization, the future, and social studies were also administered to grade 8 and grade 12 students. Student achievement was analyzed in terms of overall and sub-group performance at each grade level. Age, sex, number of schools attended, place of birth, number of years in Canada, and language used in the home, were reporting categories used to compare performance among sub-groups of students.

This assessment of student achievement and views was an evaluation of objectives that professional and non-professional publics agreed were reasonable expectations of social learnings pupils should possess at the grades 4, 8 and 12 levels. It was not an assessment of objectives derived specifically from present social studies curriculum guides.

The grades 8 and 12 instruments included items to assess student views about Canadian diversity, socialization, time, and social studies. In general, students at both levels chose responses emphasizing cooperation, shared decision-making, and mutualism, with a larger proportion of grade 12 than of grade 8 students favouring this mutualistic orientation.* A substantial proportion of Grade 8 students chose individualistic responses, emphasizing personal interests and concerns, on many items. It is worth noting, nevertheless, that on a few items dealing with immigration, differences among Canadians, and social studies, a considerable number of students at both grade levels responded hierarchically (i.e., favouring authoritarianism and unity over mutualism and diversity).

These "Views About" items were presented to teachers, school administrators, school trustees, and the general public, as well as to students. In a sense, they are objective items interpreted to 'tap' the meanings that various participants give to social studies and to social issues. The phenomenological analysis of objective data is not unknown in social research (Arnold, 1960). To the extent that the meanings to

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* See M. Muruyama, "Hierarchists, Individualists and Mutualists: Three Paradigms Among Planners," Futures, 6, 2 April 1974: 103-113.

participants is the focus of study the interpretitive paradigm is being approached. To the extent that group meanings are being characterized and summarized by objective procedures the empirical paradigm is being approximated. The epistemological distinctions 'blur' in this case.

Rating Panel Judgments of Student Performance

The lack of comparative data concerning the performance of previous British Columbia students on the social studies objectives assessed in this study made it difficult to judge the degree to which present grade 4, 8 and 12 performance is satisfactory or unsatisfactory. As a guide to readers of the report the evaluators consulted and presented reactions of panels of teachers, parents, trustees, and teacher educators to grades 4, 8 and 12 performance on the student learning assessment instruments. The rating panels were asked to rate student performance on objectives and items on the following scale:

Very Satisfied
Satisfied
Marginally Satisfied
Dissatisfied
Very Dissatisfied

Rather than prescribing criteria of satisfaction for panelists, evaluators asked panel members to state individual and collective reasons for their ratings. Statistical and interpretive summaries of ratings and reasons were shown to panel members for verification.

Rating panel judgments should be viewed as additional data concerning the reactions of groups of particular individuals to student performance. They should not be viewed as definitive interpretations of student test performance.

Views of Goals for Social Studies

The views of professional and non-professional publics concerning the goals and objectives of social studies were secured by survey questionnaire techniques (Aoki, et. al., 1977b). Specific survey items were piloted with review panels representing the various publics.

Open-ended questions, rating scales, and ranking items were utilized and analyzed to provide information about the points of view of teachers, school administrators, school trustees, and the general public regarding what should be taught in social studies. Point of view was defined as the thoughts, opinions, motives, and intentions of individuals who are members of particular social groups.

Open-ended responses were analyzed by content analysis in terms of four dimensions of social studies goals and objectives, the knowing, socialized, moral, and existential dimensions. The ranking and rating items also embodied these four dimensions and were analyzable statistically both in terms of individual items and in terms of the dimensions. This 'multi-method' approach provided the opportunity for the expression of views at different levels of specificity and in a manner that allowed for some degree of cross-validation. Furthermore, the empirical limitations associated with a particular response mode or technique were compensated by matching strengths in one or more alternate response modes. For example, the forced-choiced character of rating and ranking items, which might be seen as limiting the freedom of respondents to identify goals and objectives not available in objective items, was compensated for by the opportunity for respondent-constructed goals and objectives in the open-ended items. The extent to which open-ended responses were consistent with responses in the forced-choice modes increased confidence that the data represented the genuine views, opinions, and intentions of the respondents.

Teacher Views Concerning Actual and Desired Program Features (Aoki, et. al., 1977d)

The empirical dimension of the study of teacher characteristics, classroom activities, curriculum guides, teaching materials, curriculum development, and professional development was explored by indirect, survey questionnaire and sampling procedures. Views of actual and desired program features were secured by means of survey procedures, which met the need for breadth of information from probability samples of teachers as a whole, as well as elementary, secondary, and grade level subgroups of teachers. Teacher perceptions of program features were assumed to be valuable in

themselves. Furthermore, to the extent there was some consistency in teacher perceptions it was assumed the data would provide information about the program itself. This was an important consideration given that evaluators had little opportunity to observe program processes directly.

It is worth noting that an alternative paradigm, the interpretive, was used to study teacher interpretations of program intents, resources, and activities. This approach involving in-depth interviews of teachers and students in selected school situations will be described later by Dr. Wilson. I will only observe at this point that the study of related phenomena by empirical and interpretive means is a distinctive, though problematic, feature of the B.C. Social Studies Assessment.

Implications for Curriculum Evaluation

The interests of curriculum evaluators are not and should not be sovereign in program evaluations. The interests and needs of the clients of evaluation are equally important, yet different. The interests of evaluators are primarily cognitive interests relating to the integrity of evaluation claims. The interests of the users of evaluations are applicative interests relating to the utilization of knowledge. These interests are not necessarily incompatible.

The practical utility and level of certainty allowed by a multiple perspectives conception of curriculum evaluation is based on the assumption of complementarity of empirical, situational, and critical claims. This assumption was a working principle in the Provincial Social Studies Assessment. The possibilities of complementarity are demonstrated in the recommendations made in the Summary Report (Aoki, et. al., 1977a) of the evaluation. At least two-thirds of the recommendations are based upon insights derived from more than one knowledge perspective. Although a member of epistemological, conceptual, and methodological problems concerning the utilization of multiple ways of knowing in program evaluations remain unresolved, the diversity of roles and participant viewpoints and interests require continued examination of the complementarity of diverse approaches.

The use of diverse approaches need not imply the demeaning or rejecting of empirical procedures and perspectives. Indeed, the diversity and particular strengths of empirical evaluation may well be enhanced and complemented by a broadened conception of the means and roles of curriculum evaluation.

References

Aoki, T., C. Langford, D. Williams, and D. Wilson. Summary Report of the B.C. Social Studies Assessment. Victoria: Ministry of Education, 1977a.

Aoki, T., C. Langford, D. Williams, and D. Wilson. Goals and Situational Studies, Report No. 1 of the B. C. Social Studies Assessment. Victoria: Ministry of Education 1977b, 1-138.

Aoki, T., C. Langford, D. Williams, and D. Wilson. Teacher Views, Report No. 3 of the B. C. Social Studies Assessment. Victoria: Ministry of Education, 1977d.

Aoki, T., C. Langford, D. Williams, and D. Wilson. Student Achievement and Views, Report No. 2 of the B. C. Social Studies Assessment. Victoria: Ministry of Education, 1977c.

Apple, M. W. "Commonsense Categories and Curriculum Thought." Schools in Search of Meaning. Washington: Association for Supervision and Curriculum Development, 1975. 116-148.

Arnold, M. B. Emotion and Personality, 2 Volumes. London: Cassell, 1960.

Habermas, J. Knowledge and Human Interest. Boston: Beacon Press, 1972.

Maruyama, M. "Hierarchists, Individualists and Mutualists: Three Paradigms Among Planners." Futures, 6, 2, April 1974: 103-113.

Smith, N. L. "Truth, Complementarity, Utility and Certainty!" CEDR 11, 3, Fall 1978: 16-17.